ATOMS AND ISOTOPES REVIEW

A. Select the word that best fits the definition given.

1. _____ the smallest unit of a chemical element that has all the chemical properties of that element
2. _____ the bundle consisting of protons and neutrons, which is found in the center of an atom
3. _____ atoms of an element containing the same number of protons, but different numbers of neutrons
4. _____ a part of an atom with a positive charge
5. _____ a part of an atom with a negative charge

isotopes	nucleus
atoms	proton
electron	atomic weight

B. Indicate whether each statement is true (T) or false (F) by circling the correct letter. If the statement is false, correct it to make it true.

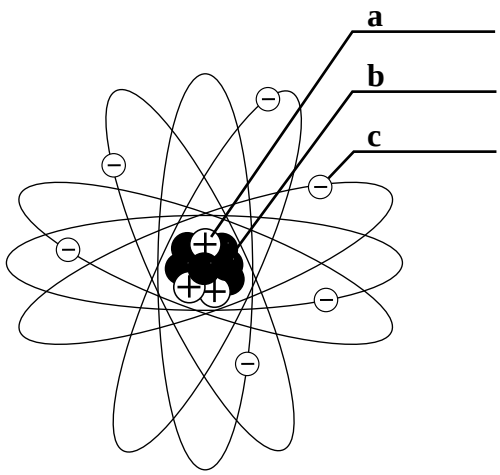
1. Unstable isotopes can change from one form to another by emitting particles and rays. T F
2. An atom is identified by the number of protons in its nucleus. T F
3. Protons and electrons together make up the nucleus of an atom. T F
4. Atoms are so small that humans cannot see them. T F
5. Atoms combine to form molecules. T F

C. Using the periodic table, tell which elements make the molecules of the following substances.

1. H_2SO_4 _____ _____ _____
2. $C_6H_{12}O_6$ _____ _____ _____
3. KOH _____ _____ _____
4. $AgNO_3$ _____ _____ _____
5. $ZnCl_2$ _____ _____

D. Models

1. Label the model of the carbon atom shown to the right. An atom of carbon has 6 protons, 6 neutrons, and 6 electrons. Remember that protons have a positive (**+**) charge, electrons have a negative (**-**) charge, and neutrons have no electrical charge.



2. Draw a model of a helium atom. An atom of helium has 2 protons, 2 electrons, and 2 neutrons. Show protons as ⊕ , electrons as ⊖ , and neutrons as ○ .